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#### **CHAPTER 5**

#### RESEARCH. DEVELOPMENT. TEST AND EVALUATION APPROPRIATIONS

0501 GENERAL

050101 Purpose

A. This chapter provides instructions applicable to budget formulation and congressional justification for Research, Development, Test, and Evaluation (RDT&E) appropriations.

B. The following appropriations and accounts are included in these regulations:

- RDT&E, Army (2040A)
- RDT&E, Navy (1319N)
- RDT&E, Air Force (3600F)
- RDT&E, Defense-Wide (0400D)
- Developmental Test and Evaluation, Defense (0450D)
- Operational Test and Evaluation, Defense (0460D)

#### 050102 Submission Requirements

General guidance on submission requirements is in Chapter 1. Chapter 5 provides additional specific requirements on justification material for the above appropriations and accounts. The above appropriations and accounts shall also submit applicable exhibits required by other chapters in the FMR including those in Chapter 19 - Special Analyses and the civilian personnel exhibits in Chapter 3 - Operation and Maintenance. The Components will also submit any exhibits required by OMB Circular A-11, Preparation and Submission of Budget Estimates.

050103 Major Defense Acquisition Programs (MDAP)

MDAP Automated Submission. In order to provide consolidated funding information on DoD's major acquisition programs, automated data submissions are required to provide the approved funding level for each MDAP. These programs include all Acquisition Category (ACAT) ID, ACAT IC, and pre-MDAP designated programs. For joint programs, the lead service/agency is to coordinate the reporting effort, but each Service and Defense Agency involved in the program is responsible for reporting the portion of the program that it funds. In an annual memorandum (usually published in mid-summer), the USD(A&T) will identify the MDAPs required for submission.

Specific data format instructions are included in Section 050502. These are similar to the automated submissions currently required by the POM Preparation Instructions (PPI) for the POM submission. The required automated submissions should be on 5 1/4 or 3 1/2 inch floppy, high or double density disks and delivered directly to OUSD(A&T), Room 1E474 (POC: Mr. Steve Dratter, telephone (703) 697-8020). The submission should agree with data submitted to the OUSD(Comptroller) for the FYDP and associated annexes. The final submission must agree with the supporting justification material submitted to the Congress.

#### 050104 Preparation of Material

General guidance on format and preparation of material is presented in Chapter 1. Chapter 5 provides additional specific requirements on justification material required for RDT&E appropriations.

#### 050105 References

Section 010210 provides policies and definitions concerning costs that are to be financed by the RDT&E appropriations as opposed to other appropriations in the R&D area.

0502 UNIFORM BUDGET AND FISCAL ACCOUNTING CLASSIFICATION

050201 RDT&E Budget Activities and Research and Development Categories

A. Budget Activity 1 and Research Category 6.1, Basic Research. Include all effort of scientific study and experimentation directed toward increasing knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to longterm national security needs. It provides farsighted, high payoff research, including critical enabling technologies that provide the basis for technological progress. It forms a part of the base for (a) subsequent applied research (exploratory development) and advanced technology developments in Defense-related technologies, and (b) new and improved military functional capabilities in areas such as communications, detection, tracking, surveillance, propulsion, mobility, guidance and control, navigation, energy conversion, materials and structures, and personnel support. Program Elements in this category would involve pre-Milestone Zero efforts.

B. Budget Activity 2 and Research Category 6.2, Applied Research (formerly, Exploratory **Development).** This activity translates promising basic research into solutions for broadly defined military needs, short of major development projects. This type of effort may vary from fairly fundamental applied research to sophisticated bread-board hardware, study, programming and planning efforts that establish the initial feasibility and practicality of proposed solutions to technological challenges. It includes studies, investigations, and nonsystem specific development efforts. The dominant characteristic of this category of effort is that it be pointed toward specific military needs with a view toward developing and evaluating the feasibility and practicability of proposed solutions and determining their parameters. Applied Research (Exploratory Development) precedes the system specific research described in DoDD 5000.1. Program control of the Applied Research (Exploratory Development) element will normally be exercised by general level of effort. Program Elements in this category would involve pre-Milestone Zero efforts.

**Budget Activity 3 and Research** Category 6.3A, Advanced Technology Development (formerly, Advanced Development), Include all efforts that have moved into the development and integration of hardware for field experiments and tests. The results of this type of effort are proof of technological feasibility and assessment of operability and producibility rather than the development of hardware for service use. Projects in this category have a direct relevance to identified military needs. Advanced Technology Development is system specific (particularly for major platforms, i.e., aircraft, ships, missiles and tanks, etc.) and includes advanced technology development that is used to demonstrate the general military utility or cost reduction potential of technology when applied to different types of military equipment or techniques Advanced Technology Development also includes evaluation and synthetic environment and proof-of-principle demonstrations in field exercises to evaluate system upgrades or provide new operational capabilities. Program Elements in this category would involve pre-Milestone I efforts. Projects in this category do not necessarily have to lead to subsequent development or procurement phases, however, program/budget justification must identify potential rough order of magnitude estimates of additional development and production costs consistent with the Department's full funding policy.

D. Budget Activity 4 and Research Category 6.3B, Demonstration and Validation. The demonstration and validation (Dem/Val) phase includes all efforts necessary to evaluate integrated technologies in as realistic an operating environment as possible to assess the performance or cost reduction potential of advanced technology. The Dem/Val phase is system specific and also includes advanced technology demonstrations that help expedite technology transition from the laboratory to operational use. Program Elements in this category would involve efforts between Milestone I and Milestone II. A logical progression of program phases and (development and/or production) funding must be evident in the FYDP.

E. <u>Budget Activity 5 and Research</u>
<u>Category 6.4. Engineering and Manufacturing</u>
<u>Development (EMD).</u> Include those projects in engineering and manufacturing development for Service use but which have not received approval for full-rate production. This area is characterized

by major line item projects and program control will be exercised by review of individual projects. Engineering Development includes engineering and manufacturing development projects consistent with the definitions within DoDD 5000.1. Program Elements in this category would involve efforts between Milestone II and Milestone III. A logical progression of program phases and (development and/or production) funding must be evident in the FYDP consistent with the Department's full funding policy.

F. Budget Activity 6 and Research Category 6.5, RDT&E Management Support. Include research and development effort directed toward support of installations or operations required for general research and development use. Included would be test ranges, military construction, maintenance support of laboratories, operation and maintenance of test aircraft and ships, and studies and analyses in support of the R&D program. Costs of laboratory personnel, either in-house or contractor operated, would be assigned to appropriate projects or as a line item in the Basic Research, Applied Research, or Advanced Technology Development program areas, as appropriate. Military construction costs directly related to a major development program will be included in the appropriate element.

G. Budget Activity 7 and Research Category 6.6, Operational System Development. Includes those development projects, in support of development acquisition programs or upgrades, still in engineering and manufacturing development (DoDD 5000.1) but which have received approval for production through DAB or other action, or production funds have been included in the DoD budget submission for the budget or subsequent fiscal year. All items in this area are major line item projects that appear as RDT&E Costs of Weapon System Elements in other programs. Program control will be exercised by review of individual projects. Program Elements in this category would involve efforts that involve post-Milestone III. A logical progression of program phases and (development and/or production) funding must be evident in the FYDP, consistent with the Department's full funding policy.

#### 0503 BUDGET ESTIMATES SUBMISSION

#### 050301 Purpose

- A. This Section prescribes instructions for the preparation and submission of the budget estimates for the RDT&E appropriations.
- B. Unless otherwise specified, these instructions apply to all RDT&E appropriations and to all budget estimates. Data submitted must be consistent with the budget estimates being supported.

#### 050302 Submission Requirements

- A. <u>Classification</u>. The budget justification material should be unclassified, All classified material should be submitted separately.
- B. Research and Development Project Listing
- 1. Project Listings will be submitted to provide specific data in support of the budget submission. An R&D project is defined as a grouping of tasks or efforts directed toward a single end result. As such, a project will contain an effort unique to a single program element and the budget activity of which that element is a part.
- 2. Project Listings will contain the following information arranged according to program structure:
  - a. Project title and number.
- b. Budget activity designation for each project and program element. Appropriate security classification coding should be included as part of each program element title listed.
- c. TOA for the past fiscal year (PY), the current fiscal year (CY), the budget years (BY1 and BY2), and the next four years (BY2+1 through BY2+4).
- d. Data entries for each project and fiscal year for the previous President's budget request, the POM submission, and the current budget estimate submission.

- e. R&D Project Listings will include totals by (1) Program Element, (2) Budget Activity, and (3) Appropriation.
- 3. Project Listings will be submitted in the number of copies identified in Section 010302 and will be marked with a statement that the document is not releasable to non-DoD personnel without approval of the originating office.
- 4. Two sets of project listings arranged in budget activity, program element, project order will be provided directly to the OUSD(C) P/B Investment Directorate (Room 4B915).
- Each Component will provide 3 copies of a computer run that compares the current OSD/OMB budget estimates submission to the previous President's budget submission and identifies the changes for each RDT&E appropriation by R-1 line item and by project. The report should also identify appropriation and budget activity totals for each fiscal year for the PY through BY2+4 timeframe. The totals for the appropriation and budget activities should also compare the current budget estimates submission to the previous President's budget and provide the applicable changes. If a line item has more than one project then a comparison total should be provided at the project level. the R-1 line item as well as at the budget activity total level and the appropriation level. The Components will also provide this same information in an Excel or Lotus 123 spreadsheet on a 5 1/4 or 3 1/2 inch floppy, high or double density diskette. The diskette should be labeled with the appropriation being submitted, Component name, file name, classification, and the name of a point of contact along with a telephone number. These reports and spreadsheets must match the hard copy justification material being submitted for the OSD/OMB budget review. It is preferred that these reports and diskettes be unclassified. If it is necessary to submit classified data then it should be submitted in a separate report and on a separate file. The unclassified report must match the total for the appropriation/account being submitted. These comparison reports and diskettes should be provided directly to OUSD(C), Director for Investment, Room 4B915, on September 15th along with the rest of the Component's justification material for the budget estimates submission.
- C. Exhibit R-1 RDT&E Programs (See Section 0505)

# D. RDT&E Budget Item Justification Book

- 1. The first page under the cover (page i) will be a "fly leaf" page with the heading "Budget Justification for Program Elements of the (Component) Research and Development Program." Under this heading, on a separate line, print "FY-19BY1/19BY2," and under this on a separate line, print month and year prepared, such as "September 1996." Follow with a narrative describing the contents.
- 2. Table of contents (pages ii..., vi..., x..., etc.), organized in budget activity/program element sequence (R-1 order). A second listing of program elements sorted alphabetically shall also be included. Each of these listings must include the program element number, program element title, R-1 line item number and the appropriate page number. For those Components that have a large number of PEs and printing the material all in one volume is impractical, it is preferred that the justification material be submitted by budget activity with the Science and Technology budget activities (BA 1 through BA 3) printed in one volume and the remaining budget activities printed in a separate volume or in individual volumes. Each separate book should include an R-1 listing and a table of content indicating which volume and page the applicable program element can be found.
- R-exhibits shall be included for each program element as required in Section 0505. Format and detailed instructions for preparation of R-exhibits are provided in Section 0505. The required exhibits shall be packaged in the following order, as applicable R-2 (PE 1), R-2 (PE 1, Project A), R-3 (PE 1, Project A), R-2 (PE 1, Project B), R-3 (PE 1, Project B), etc. If the justification material is printed double sided, then each PE package must begin on the front side of a new page. When the last page of a PE package does not end on the backside of the paper, then a blank page must be inserted with the wording "This page intentionally left blank" in bold letters, centered on the page. The reason for this is so that the justification material can be easily broken apart and sorted by PE with all of the pertinent exhibits.
- a. R-2 exhibits shall be included for each RDT&E program element funded in the current (CY) or budget years (BY1 and BY2). All funding associated with each major

system new start shall be identified in a unique Program Element. Care should be taken to see that exhibits are clear and concise. Abbreviations shall be identified on the page on which they occur. Security classifications will be in accordance with Section 010108. Format and detailed preparation instructions for preparation of this exhibit are provided in Section 0505.

# b. <u>Exhibit R-3 RDT&E</u> <u>Program Element/Project Cost Breakdown (See</u> Section 0505)

- E. Facilities Exhibit. For major improvements to and construction of government-owned facilities funded by RDT&E, a DD Form 1391, Military Construction Project Data, will be provided separately for each budget year project and any PY or CY projects not previously reported for proposed government-owned facilities. A DD Form 1391 is required to support the lump-sum estimate for minor conduction. These exhibits will be fastened together and a copy will be provided to the OUSD(C) P/B Investment Directorate (4B915) and to the Military Construction Directorate (3D840):
- F. Exhibit R-32. Coincident with the submission of justification material to support the Budget Estimates Submission, the R-32 exhibit is required to identify purchases from the DBOF for each RDT&E appropriation. One copy is to be provided directly to the OUSD(C) P/B Investment Directorate (4B915) and one copy is to be provided directly to the OUSD(C) P/B Revolving Funds Directorate (3B866).
- G. Exhibit 44-C. OMB Circular No. A-11 has incorporated the requirements for this research and development exhibit into the automated MAX schedule C. Subsequent instruction will be provided by the Director for Investment, OUSD(C) regarding the specific requirements for this submission to OMB'S MAX system.
- H. <u>Project Comparison Reports.</u> Project comparison reports and diskettes will be submitted directly to OUSD(C) P/B Investment Directorate (4B915). Specific requirements are identified in Section 050302, paragraph B.5.

# 0504 CONGRESSIONAL JUSTIFICATION/PRESENTATION

050401 Purpose

This Section presents the justification book organization and the exhibit requirement for submission to Congress. Preferred formats for the budget exhibits can be found in Section 0505.

050402 Organization of Justification Books

A. Justification material will be organized into one volume entitled

Supporting Data for Fiscal Year 19BY1/19BY2 Budget Estimates RDT&E Budget Item Justification

- B. This volume will be divided into two sections, organized as shown below:
  - 1. Section I R-exhibits.
- a. The first page under the cover (page i) will be a "fly leaf" page with the heading "Budget Justification for Program Elements (PE) of the (Component) Research and Development Program." Under this heading, on a separate line, print "FY 19BY1/19BY2," and under this on a separate line, print month and year prepared, such as "February 1997." Follow with a narrative describing the contents (See Exhibit R-33, Section 0505).
- b. Table of contents (pages ii..., vi..., x..., etc.), organized in budget activity/program element sequence (R-1 order). A second listing of program elements sorted alphabetically shall also be included. Each of these listings must include the program element number, program element title, R-1 line item number and the appropriate page number.
- c. A copy of the OSD-generated R-1 report must be included.
- d. RDT&E exhibits shall be formatted, detailed, and included for each program element as required in Section 0505. The required exhibits shall be packaged in the following order, as applicable: R-2 (PE 1), R-2 (PE 1, Project A), R-3 (PE 1, Project A), R-2 (PE 1, Project B), R-3 (PE 1, Project B), etc.

- 2. Section II Facilities Exhibits. For major improvements to and construction of government-owned facilities funded by RDT&E, a DD Form 1391, Military Construction Project Data, will be included in this section for each project in the budget years and any PY or CY projects not previously reported for proposed government-owned facilities. A DD Form 1391 is required to support the lump-sum estimate for minor construction included in part 3 of this section. This estimate will continue to be a contingency estimate based on past experience as related to the budget year program.
- C. Classification. The budget justification material should be unclassified. All classified material should be submitted separately.
- D. Printing of Congressional Justification Books for the RDT&E appropriations will be printed as follows:
- 1. See Chapter 1 Section 0104 for specific printing instructions.
- 2. Since the justification material is printed double sided, then each PE package must begin on the front side of a new page. When the last page of a PE package does not end on the backside of the paper, then a blank page must be inserted with the wording "This page intentionally left blank" in bold letters, centered on the page. The reason for this is so that the justification material can be easily broken apart and sorted by PE with all of the pertinent exhibits.
- 3. For those Components that have a large number of PEs and printing the material all in one volume is impractical, it is preferred that the justification material be submitted by budget activity with the Science and Technology budget activities (BA 1 through BA 3) printed in one volume and the remaining budget activities printed in a separate volume or in individual volumes. Each separate book should include an R-1 listing and a table of content indicating which volume and page the applicable program element can be found.

#### 050403 Comparison Reports

A. Each Component will provide 3 copies of a computer run that compares the current President's budget submission to the previous President's budget submission and identifies the changes for each RDT&E appropriation by R-1 line

item and by project. The report should also identify appropriation and budget activity totals for each fiscal year for the PY through BY2+4 timeframe. The totals for the appropriation and budget activities should also compare the current President's budget submission to the previous President's budget and provide the applicable changes. If a line item has more than one project then a comparison total should be provided at the project level, the R-1 line item as well as at the budget activity total level and the appropriation level. The Components will also provide this same information in an Excel or Lotus 123 spreadsheet on a 5 1/4 or 3 1/2 inch floppy, high or double density diskette. The diskette should be labeled with the appropriation being submitted, Component name, file name, classification, and the name of a point of contact along with a telephone number. These reports and spreadsheets must match the hard copy justification material being submitted to the Congress. It is preferred that these reports and diskettes be unclassified. If it is necessary to submit classified data, then it should be submitted in a separate report and on a separate file. The unclassified report must match the total for the appropriation/account being submitted.

B. These comparison reports and diskettes should be provided directly to OUSD(C), Director for Investment, Room 4B915, when the Component has finalized its project listing for the current President's budget submission but no later than when the justification material receives final approval from the OUSD(C) for submission to the Congress.

050404 Defense Technical Information Center (DTIC) Requirements

A. The Defense Technical Information Center (DTIC) will make all unclassified RDT&E budget justification material available to the public over the World Wide Web. The Military Departments and Defense Agencies will provide DTIC with electronic files of their unclassified RDT&E budget justification material within 2 weeks after the budget justification material is delivered to the Congress. For those budget exhibits containing classified information, the Military Departments and Defense Agencies will remove the classified information from the electronic files (using procedures approved by their local ADP security officers), insert the words "[classified material deleted]", and provide the sanitized electronic files to DTIC within 2 weeks after the budget justification material is delivered to the Congress.

B. The electronic files may be in either Word or Word Perfect format and may be provided to DTIC on either 3-1/2 inch or 5-1/4 inch diskettes. The diskettes, along with a paper copy printout of their contents, should be mailed or hand-delivered to:

Defense Technical Information Center (DTIC) Program Analysis Branch (DTIC-APP) ATTN: Mr. Scott Douglas 8725 John J. Kingman Road, Suite 1940 Fort Belvoir, Virginia 22060-6218

C. Before providing the electronic files to DTIC, the program element number and title should be inserted at the beginning of each file in the following format:

PE NUMBER: (2 spaces) 0604256N
PE TITLE: (2 Spaces) Threat Simulator
Development

If the justification material for program element consists of several files, a directory should be created on the diskette containing all the files for that program element. More than one directory may be on a single diskette.

Questions concerning the preparation of the electronic files may be addressed to Mr. Scott Douglas, DTIC, telephone (703) 767-9142.

0505 RDT&E APPROPRIATION SUBMISSION FORMATS

050501 Purpose

The formats provided on the following pages reflect requirements presented in previous sections of this chapter. Formats currently being used within each Service and Defense Agency may be used in lieu of the formats contained in Section 050502 as long as all of the information required by the exhibits in Section 050502 is provided. With this exception and unless modified in an Office of the Under Secretary of Defense (Comptroller) budget submission memorandum, the formats in these exhibits shall be adhered to.

050502	Exhibits in	Support	of Section	0503 - Bi	udget I	Estimates	Submission
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R-1, RDT&E Programs	10
R-2, RDT&E Budget Item Justification	
R-3, RDT&E Program Element/Project Cost Breakdown	
R-32, RDT&E Purchases from DBOF	22
R-33, Program Element Comparison Summary	
MDAP RDT&E Project Level (PL) Data	27
050503 Exhibits in Support of Section 0504 - Congressional Justification  R-1, RDT&E Programs	10
R-2, RDT&E Budget Item Justification	12
R-3, RDT&E Program Element/Project Cost Breakdown	
R-33, Program Element Comparison Summary	25
MDAP RDT&E Project Level (PL) Data	

## Exhibit R-1, RDT&E Programs

Department of the \_\_\_\_\_

Appropriation:	Date:
	TOA, \$ in Millions

					<u>10A, c</u>	) III WIIIIUIIS	
	Program			Past	Current	Budget	Budget
R-1 Line	Element		Budget	Year	Year	Year 1	Year 2
<u>Item No</u>	<u>Number</u>	<u>Item</u>	<u>Activity</u>	<u>Cost</u>	<u>Cost</u>	<u>Cost</u>	<u>Cost</u>

**Exhibit R-1, RDT&E Programs** (Exhibit R-1, page 1 of 2)

#### Instructions - Exhibit R-1, RDT&E Programs

#### I. General.

- A. Unless otherwise specified, this format will be used to present the Research, Development, Test and Evaluation (RDT&E) program to:
- 1. The Office of the Under Secretary of Defense (Comptroller), in support of the OSD/OMB budget review.
  - 2. The Congress, in support of the President's budget request.

#### II. RDT&E Line Item Content.

A. The basic document for presenting RDT&E requirements is the Exhibit R-1, RDT&E Programs, provided to the Congress as supporting justification for budget requests. The R-1 line items are program elements, which define a development effort with specific design, cost, schedule and capability parameters. All costs of basic and applied scientific research, development, test, and evaluation, including maintenance, rehabilitation, and lease/operation of facilities and equipment will be included in appropriate R-1 line items.

- B. The R-1 exhibit will contain the following information:
- 1. Program element title and number. Appropriate security classification coding should be included as part of each program element title listed. All classified material should be bracketed.
- 2. Line items will be arranged in ascending program element order within each budget activity (research category).
- 3. Approved funding for the past year (PY), the current year (CY), budget year 1 (BY1), and BY2.
  - 4. Summaries by (1) Budget Activities and (2) FYDP Programs.

(Exhibit R-1, page 2 of 2)

	F	Exhibit R-2, RE	T&E Budget 1	tem Justificat	ion			Date:	Month/Year				
APPROPRIATION/BUDGET ACTIV	PPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE Program Element (PE) Name and No.						
COST (\$ in Millions)	FY PY	FY CY	FY BY1	FY BY2	FY BY2 +1	FY BY2 +2	FY BY2 + 3	FY BY2 + 4	Cost to Complete	Total Cost			
Total PE Cost													
Project A Name/No. & subtotal cos													
Project A Name/No. & subtotal cos													
Project A Name/No. & subtotal cos			1	<u> </u>			*						
Quantity of RDT&E Articles		<del></del>	<del>                                     </del>										

## A. Mission Description and Budget Item Justification

Provide a description of the program and narrative justification for the PY, CY, BY1, and BY2.

Provide a justification for budget activity assignment of the program element.

Provide an acquisition strategy.

D	Ducamana	Change	C	
D.	Frogram	Change	Summary	ŗ

PY CY

BY1

BY2

Total <u>Cost</u>

FY(CY) President's budget

Appropriated Value

Adjustments to Appropriated Value

a.

b.

FY(BY1) BES/President's budget request

Change Summary Explanation: (Total Program Element or Project, as applicable. Use a continuation page as necessary.)

Funding: (Total Program Element or Project, as applicable)

Schedule: (Total Program Element or Project, as applicable).

Technical: (Total Program Element or Project, as applicable)

The R-2 exhibit must be consistent with the R-1 and the R-3 exhibits.

R-1 Shopping List - Item No 20-X

Page No. xxx

Exhibit R-2, RDT&E Budget Item Justification

(Exhibit R-2, page 1 of 4)

	Exhibi	t R-2, RDT&	E Budget I	tem Justific	ation			Date: I	Month/Year	
APPROPRIATION/BUDGET ACTIV	TTY	,	<b></b>		Program I	Element (PE) N	ame and No.			
Cost (\$ in Millions) FY PY FY CY FY BY1 FY BY2 FY BY2 +1 F  Total PE Cost  ject A Name/No. & subtotal cos antity of RDT&E Articles  Other Program Funding Summary  PY CY BY1 BY2 BY2+1  If Procurement Line Item No, Name. Provide related funding detail as indicated. Use 1 Milcon Project No, Name. It is not necessary to include the related It tween the RDT&E program.  Schedule Profile  Ist planned events from the milestone chart and show beginning and ending times by collectone chart can be submitted in lieu of this section.  PY CY BY1 BY2 BY2+1  If Procurement Line Item No, Name. Provide related funding detail as indicated. Use 1 Milcon Project No, Name.  It is not necessary to include the related It tween the RDT&E program.  Schedule Profile  If Py CY BY2 CY I 2 3 4 CY I 2 3	FY BY2 +2	Cost to Complete	Total Cos							
Total PE Cost										
Project A Name/No. & subtotal cos										
Quantity of RDT&E Articles		•						•	<u> </u>	
		D)/1	ns.	<b>'</b> 0	DV2 - 1	<u>BY2+2</u>	BY2+3	BY2-	To -4 Complete	Total <u>Cost</u>
<u>PY</u>	CY	<u>BY1</u>	<u> </u>	<b>∠</b> .	<u>D1Z+1</u>	<u>DIZ+Z</u>	<u>D12+3</u>	<u>D127</u>	Complete	<u>C03t</u>
between the RDT&E program		ames. It is n	ot necessar	y to includ	e the relate	a KD1&E II	manig prom	e uruess trie	ie is a rununig dep ,	endency
List planned events from the milestone chart can be submitted	milestone c	hart and sho	ow beginni	ng and end	ing times b	y quarter (ia	lentify the spe	cific month if	possible) The progr	ram's
		1	<u>PY</u> 2 3 4		<u>CY</u> 1 2 3	3 4	1 2	BY1 2 3 4	<u>B</u> 1 2	<u>Y2</u> 3 4
Engineering Milestones T&E Milestones Contract Milestones										

Contract Milestones

Other Program Events

Other Program Events. Include other programs progress events so that at lease three milestones and events are shown in each year. Include all acquisition program baseline events for the 4 fiscal years indicated.

Provide a list, with estimated fiscal year and quarter, of all planned major milestones and test and evaluation events, such as LRIP approval, Milestone III, IOC, Developmental Test and Evaluation, and Operational Test and Evaluation that are beyond BY2.

R-1 Shopping List - Item No 20-X

Page No. xxx

Exhibit R-2, RDT&E Budget Item Justification (Exhibit R-2, page 2 of 4)

#### Instructions - Exhibit R-2, RDT&E Budget Item Justification

General: An Exhibit R-2 shall be prepared for each R-1 line item in the format illustrated. One or more R-2 pages shall be prepared for each project within a program element. These pages shall be printed on 8 1/2 by 11 inch paper in landscape format.

Classification: Each page shall be marked in the center at the top and bottom with the classification of that page. Classified material shall be bracketed. The total program element page shall be marked with the highest level of classification of pages associated with that program element. If this total program element page includes only unclassified information, it shall be further marked, "Unclassified upon removal of attachments."

Date: Include the month and year of submission of the exhibit.

Appropriation/Budget Activity: The Service or Agency appropriation and the budget activity shall be identified.

R-1 Item Nomenclature: The name of the R-1 line item shall be identified.

Program Element Number: The OSD approved number of the program element shall be identified.

Project Number and Nomenclature: The project number and nomenclature shall be identified on each separate project R-2 page.

Resource Summary: The total program element R-2 page shall include a fiscal resource summary total for the program element and, if there is more than one project in that program element, a fiscal resource summary for each project in that program element. Each project R-2 page shall include a resource summary for that project. If program element restructuring and project realignment diminish the value of cumulative fiscal resource information for FY PY, this column shall be footnoted with an explanation of the program elements that were restructured and realigned. If this program element represents continuing similar efforts without distinct program or project initiations and completions, the "To Complete" and "Total Program" columns shall be marked "Continuing." *Include the quantity of RDT&E articles that is being procured each year. Be prepared to show the cost, by fiscal year, associated with the procurement of the end items.* 

A. Mission Description and Budget Item Justification: The total program element R-2 page shall include a description and justification of the efforts included in the program element. Each project R-2 page shall include a description and justification of the efforts of the project. Project justification narratives shall be included for the past year (PY), the current year (CY), and the budget year 1 (BY1) and BY2. Project justification narratives shall be in a bulletized format. At least three, and preferably more, activities shall be identified for each project in each fiscal year. Identify the funding associated with each of these activities in the bulletized narrative. The total of funding reflected in the bulletized narratives should match the total of project funding. At the end of the bulletized narratives, identify the forecasted beginning and ending timeframe that the funds will be obligated.

Justification for Budget Activity Assignment: The total program element R-2 page shall include a justification for the assignment of that program element to the budget activity indicated on the page.

Acquisition Strategy: An explanation of acquisition, management, and contracting strategies shall be provided for each project.

(Exhibit R-2, page 3 of 4)

#### Exhibit R-2 Instructions (Continued)

B. Program Change Summary: If there have been changes to total program element or project funding, schedule, or technical parameters since the previous *President's* budget submission, the R-2 exhibit shall include a concise narrative summary explanation of changes in total program element or project funding, schedule, or technical parameters since the previous budget submission shall be provided. This explanation may repeat or refer to the more detailed information provided in the other budget exhibits for the program or project. Also, this explanation may refer to more detailed reports or other documentation that may be available.

C. Other Program Funding Summary: Development projects often lead to subsequent development phases, production, and military construction. Also, some projects may depend on concurrent development in other projects. These related efforts and the funding profiles for other appropriation efforts shall be identified by appropriation, budget activity, R-1 line item and program element, and P-1 line item title and number. If there are funding dependencies among related research, development, test, and evaluation programs, then the funding profiles for these related programs shall be included.

D. Schedule Profile: For acquisition programs, actual or planned event information shall be provided for each of the 4 fiscal years (PY, CY, BY1, BY2) shown on each project R-2 exhibit. Actual events shall be marked with an asterisk. At least three events shall be provided in each year, and all acquisition program baseline events in the 4 years displayed shall be included. A list, with estimated fiscal year and quarter, of all planned major milestones and test and evaluation events, such as LRIP approval, Milestone III, IOC, Developmental Test and Evaluation, and Operational Test and Evaluation that are beyond BY2 shall be provided. The same events shall be retained from one budget submission to the next so that project progression can be seen as each succeeding budget submission advances into subsequent years. For non-acquisition programs, meaningful data should be provided. The program's milestone chart can be submitted in lieu of this section as long as the information required by this section is included.

Continuation pages may be used as necessary.

R-1 Item Number: The R-1 item number shall be identified.

Page: The exhibit page number and total number of exhibit pages associated with a particular R-1 item shall be identified.

(Exhibit R-2, page 4 of 4)

Exhibit R-3, RDT&E PROGRA	AM ELEMENT/P	ROJECT COST	BREAKDOWN	Date: Month/Year
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NO	MENCLATURE/PE No/Project No	)
A. <u>Project Cost Breakdown</u>				
<u>FY</u>	<u>PY</u>	FY CY	FY BY1	FY BY2
Project Cost Categories				
Cost Categories Sample cost categories are show development efforts. Costs shall be distributed a project office in project execution. The illustrated execution. Sample cost categories not used in product a. b. c.	mong categories i l sample cost cate	in accordance v gories maybe u	vith the project work breakdown str used if these correspond to the proje	ructure used by the
Total (must match fiscal resources shown on the	R-2 for the project	ct)		

**Exhibit R-3, RDT&E Program Element/Project Cost Breakdown** (Exhibit R-3, page 1 of 6)

Page No xxx

R-1 Shopping List - Item No 20-X

Exhibit R-3,	RDT&E PRO	OGRAM ELEM	ENT/PR	OJECT COST	BREAKDO	WN		Dat	e: Month/Y	Year
APPROPRIATION/BUDGET ACTIVITY	ГҮ			R-1 ITEM NON	MENCLATUR	E PE NUMBI	ER/PROJECT	Γ NUMBER		
B. <u>Budget Acquisition History and Plate</u> <u>Performing Organizations</u>	nning Informa	<u>tion</u>								
dovernment medical lype	Award or Obligation <u>Date</u>	Performing Activity <u>EAC</u>	Project Office <u>EAC</u>	Total Prior to <u>PY</u> Actua	<u>PY</u> l or Budget V	<u>CY</u> alue (\$ in mil	<u>BY1</u> lions, to 3 de	<u>BY2</u> ecimal place:	To <u>Complete</u> s)	Total <u>Program</u>
Product Development Organizations (List each organization separatel	y)									
Support and Management Organization (List each organization separatel	ons y)									
Test and Evaluation Organizations (List each organization separatel	y)									
Government Furnished Property										
Contract Method/Type or Funding <u>Vehicle</u>	Award or Obligation <u>Date</u>	Deliver <u>Date</u>	y	Total Prior to <u>PY</u> Actua	<u>PY</u> l or Budget V	<u>CY</u> alue (\$ in mil	<u>BY1</u> llions, to 3 d	<u>BY2</u> ecimal place	To <u>Complete</u> s)	Total <u>Program</u>
Product Development Organizations (List each organization separate	ly)									
Support and Management Organization (List each organization separate)										
Test and Evaluation Organizations (List each organization separate	ly)									
Subtotal Product Development Subtotal Support and Management Subtotal Test and Evaluation Total Project (should match fiscal reso	urces shown on	the R-2 for the pro	oject)							

R-1 Shopping List - Item No 20-X

### Instructions - Exhibit R-3. RDT&E Program/Element/Project Cost Breakdown

General: The R-3 series exhibits are required only for projects in Research, Development, Test, and Evaluation (RDT&E) appropriations Budget Activities 4, 5, and 7. A separate R-3 exhibit shall be prepared for each project in an applicable R-1 line item in the format illustrated. These exhibits shall be printed on 8 1/2 by 11 inch paper in landscape format. If a program element is not divided into projects, then the program element itself is defined as a project for purposes of submitting an R-3 exhibit, and the R-3 exhibit and instructions apply to the entire program element.

Classification: Each page shall be marked in the center at the top and bottom with the classification of that page. Classified material must be bracketed.

Date: Identify the month and year of submission of the exhibit.

Appropriation/Budget Activity: Identify the Service or Agency appropriation and the budget activity.

R-1 Item Nomenclature: Identify the name of the R-1 line item.

Program Element Number: Identify the number of the program element.

Project Number and Nomenclature: Identify the project number and nomenclature on each R-3 page.

Section A. Project Cost Breakdown: Project cost information shall be provided for each project for the 4 fiscal years (PY, CY, BY1, BY2) shown on the R-3 exhibit with project costs broken down into cost categories.

Cost Category: Sample cost categories are shown below that are typical of various types of defense research and development efforts. Costs shall be distributed among categories in accordance with the project work breakdown structure used by the project office in project execution. The illustrated sample cost categories may be used if these correspond to the project work breakdown structure; however there is no requirement to use cost categories other than those used by the project office in project execution. Sample cost categories not used in project execution need not be included in the exhibit for that project.

#### Sample Cost Categories:

Primary Hardware Development **Ancillary Hardware Development Development Support Equipment Acquisition** Research Support Equipment Acquisition Software Development Licenses **Systems Engineering** Training Development **Integrated Logistics Support** Configuration Management Technical Data Developmental Test and Evaluation **Operational Test and Evaluation** Contractor Engineering Support Government Engineering Support Program Management Support Program Management Personnel Travel Research Personnel Miscellaneous (less than 15 percent of total)

(Exhibit R-3, page 3 of 6)

#### Exhibit R-3 Instructions (Continued)

Section B. Budget Acquisition History and Planning: This section shall be provided for each project that meets any one or more of the following criteria:

- a. Designation by OUSD(A&T) as a Major Defense Acquisition Program, either a Defense Acquisition Board or a Component program, or
- b. CY, BY1 or BY2 funding revision of greater than plus or minus 10 percent from the previous President's budget FYDP base, or
  - c. Major milestone schedule change of more than 6 months, or
  - d. PY expenditures less than 35 percent through July of the current calendar year, or
  - e. PY obligations less than 85 percent through July of the current calendar year, or
- f. New programs other than those created by administrative actions, such as those created through breakout or consolidation of previously budgeted efforts.

Information Categories: Information is divided into three categories as follows:

Product Development: All efforts associated with the delivery of a fully integrated system that are in direct support of the system and essential to the development, training, operation, and maintenance of the system. Include all efforts directly supporting system development and delivery to include primary contracts, major component contracts, contracted services, in-house support, and government furnished property. Contracts or government efforts over \$1 million in any displayed budget year shall be reported individually.

Support Costs and Management Services: Efforts not directly associated with the delivery of the primary product, including technical engineering services, research studies, and technical support not related directly to product development or to testing and evaluation. All efforts associated with services provided in support of program office management and administration processes such as: program oversight, resource justification, budget and programming, milestone and schedule tracking. Federally Funded Research and Development Centers (FFRDCs) are in this category. Contracts or government efforts over \$1 million in any displayed budget year shall be reported individually.

Test and Evaluation: Efforts (other than those included within contracts or government efforts included above) associated with engineering or support activities to determine the acceptability of a system, subsystem, or component. Contracts or government efforts over \$1 million in any displayed budget year shall be reported individually.

Performing Organizations: This portion of the exhibit shall identify each contractor and government activity effort in excess of one million dollars in any of the displayed years. Efforts of less than \$1 million in all of the displayed years may be aggregated together in a "miscellaneous" line item. The performing activity name and location shall be identified.

(Exhibit R-3, page 4 of 6)

### Exhibit R-3 Instructions (Continued)

Contract Method/Type or Funding Vehicle: The following codes shall be used to identify the contract method and type and funding vehicle:

Contract Method:

SS - Sole Source C - Competitive

Contract Type:

FP - Fixed Price

CPIF - Cost Plus Incentive Fee FPI - Fixed Price Incentive CPAF - Cost Plus Award Fee CPFF - Cost Plus Fixed Fee FFP - Firm Fixed Price

**Funding Vehicle:** 

MIPR - Military Interdepartmental Purchase Request

PO - Project Order WR - Work Request Allot - Allotment Reqn - Requisition

Award or Obligation Date: Provide actual or estimated date of contract award or the estimated date that funds will be obligated to government performing activities in the BYs.

Performing Activity Estimate at Completion (EAC): Provide the current contractor or government performing activity estimate of the total cost of the effort.

Project Office Estimate at Completion (EAC): Provide the program manager's best estimate of the total cost of the effort.

Total Prior to PY: Provide actual amounts for the total of all years before the past year (PY).

PY through BY2: Provide actual or budget amounts for each year for past year (PY), current year (CY), budget year (BY1), and BY2.

To Complete: Provide the amount required to complete this effort beyond BY2.

Total Program: Provide the cumulative total of all budgeted funds for the program (including funds obligated/budgeted for prior to PY, PY, CY, BY1, BY2, and to complete).

Government Furnished Property: Property, such as hardware, software, or information, which the government is contractually obligated to furnish a contractor or government performing activity shall be identified. Efforts of less than one million dollars in all of the displayed years may be aggregated together "miscellaneous" line item. Provide a brief identification of the item to be provided, and the contractor or government activity providing the item.

Contract Method/Type or Funding Vehicle: Provide method of transferring funds to this activity, from those identified under "Contract Method/Type" or from "Funding Vehicle" above.

Obligation Date: Provide actual or estimated date that award or obligation is incurred.

(Exhibit R-3, page 5 of 6)

#### Exhibit R-3 Instructions (Continued)

Delivery Date: Provide estimated date that the government furnished property will be provided to the requiring contractor or activity. Provide the name of the requiring contractor or activity.

Prior to PY: Provide actual amounts for the total of all years before the past year (PY).

PY through BY2: Provide actual or budget amounts for each year for PY, CY, BY1, and BY2.

To Complete: Provide the amount required to complete this effort beyond the BY2.

Total Program: Provide the cumulative total of all budgeted funds for the program (including funds obligated/budgeted for prior to PY, PY, CY, BY1, BY2, and to complete).

Subtotals of Performing Organizations and Government Furnished Property funding amounts for each year shall be provided for Product Development, Support and Management, and Test and Evaluation. A grand total for each year shall be provided. This grand total should match the fiscal resources shown on the R-2 exhibit for the project.

R-1 Item Number: The R-1 item number shall be identified.

Page: The exhibit page number and total number of exhibit pages associated with the R-1 item shall be identified.

# Exhibit R-32, RESEARCH, DEVELOPMENT, TEST & EVALUATION (RDT&E) Purchases from DBOF (TOA, \$ in Millions)

<b>Business Areas</b>	<b>Current Year</b>	Year Budget Year 1 Budget Year 2					2				
	CY	Price		Program		BY1	Price		Program		BY2
Army	Program	Growth	%	Growth	%	Program	Growth	%	Growth	%	Program
		Groven	70	0.0 0 77 0.0	<u> </u>	8			5.5 5 77 5.5		
411 Army Supply Management											
601 Army Depot Maint-Ord Arm Corn											
602 Army Depot Maintenance-Other											
648 Army Information Services											
						_					<u> </u>
	1	1		1	1	1		Ì	Ì	1	1
<u>Navy</u>											
412 Navy Supply Management											
615 Navy Information Services											
633 Defense Printing Service (FY 1996 only)				ļ					ļ		
Research and Development											
610 Naval Air Warfare Center											
611 Naval Surface Warfare Center											
612 Naval Undersea Warfare Center											
614 Naval Cmd, Ctrl & Ocean Surv Ctr											
630 Naval Research Laboratory											
631 Naval Facilities Engineering Service Ctr											
Depot Maintenance											
613 Depot Maintenance- Aircraft											
632 Depot Maintenance-Ordnance											
637 Depot Maintenance-Ships											
640 Depot Maintenance-Other (USMC)											
•											
Transportation (Sealift Services):											
620 Fleet Auxiliary Force											
621 Afloat Prepositioning Ships											
623 Special Mission Supports											
624 Other Sealift Purchases											
Navy Base Support Services:											
634 Public Works - Utilities											
635 Public Works - Other											
639 Public Works (Composite Rate)		D 4 61									D . N

R-1 Shopping List - Item No 20-1

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Exhibit R-32, RDT&E Purchases from DBOF

(Exhibit R-32, page 1 of 3)

Exhibit R-32, RESEARCH, DEVELOPMENT, TEST & EVALUATION (RDT&E) Purchases from DBOF.

## (TOA, \$ in Millions)

<b>Business Areas</b>	<b>Current Year</b>		Buc	dget Year 1		Budget Year					2		
	CY	Price		Program		BY1	Price		Program		BY2		
Air Force	Program	Growth	%	Growth	%	Program	Growth	%	Growth	%	Program		
414 Air Force Supply Management													
649 Air Force Information Services													
653 Transportation (Airlift Svcs (Training))													
Air Force Depot Maintenance													
661 Organic Operations													
662 Contract													
											•		
<u>Defense</u>													
402 Fuel Purchases (DFSC)													
415 DLA Supply Management													
633 Defense Printing Services (beg FY 1997)													
647 Defense Megacenters (DISA)													
650 DLA Information Services													
651 DFAS Information Services													
670 Defense Automatic Addressing Systems													
671 Communications Services (DISA)													
672 Purchases from Pentagon Reservation Maintenance Revolving Fund 673 Financial Operations (DFAS)													
Maintenance Revolving Fund													
673 Financial Operations (DFAS)													
674 Distribution Depots (DLA)													
675 Def Reutilization & Mktg Svcs (DRMS)													
676 Def Industrial Plant Eqpt (FY 1996 only)													
677 Joint Logistics Systems													
680 Purchases from Bldg Maint Fund													
USTRANSCOM											<del> </del>		
			-		-	1		-					
701 AMC Cargo/Passenger (Fund)											<b>_</b>		
702 AMC SAAM/TJS Fund													
711 MSC Cargo (Fund)													
721 MTMC Port Handling (Fund)				N							D N		

R-1 Shopping List - Item No 20-1

Page No xxx

(Exhibit R-32, page 2 of 3)

#### Instructions - Exhibit R-32. RDT&E Purchases from DBOF

1. Purpose. The purpose of this exhibit is to estimate the amount of new orders planned to be sent to the Defense Business Operations Fund (DBOF) business areas. The RDT&E appropriations will report, estimates of funding for DBOF business areas on the Purchases from DBOF Exhibits. For each appropriation, the Component will estimate by DBOF business area the amount of new orders planned to be sent to DBOF business areas for the CY, BY1 and BY2. The amounts provided should reflect the amount shown by the DBOF activity on the Fund-11 exhibit. Price growth will reflect the amount of inflation on the difference between fiscal years funding (change in DBOF rates). Program growth will show the change in program absent the effect of inflation. For further guidance, see the instructions for completing the OP-32 exhibit (Chapter 030402). A copy of the R-32 exhibit will also be provided directly to the Revolving Funds Directorate, Rm 3B866, the Pentagon.

#### 2. Specific Instructions:

In addition to the guidance above and in the OP-32 Exhibit instructions, the following provides by business area, the types of purchases reported on the R-32 exhibits:

- (1) Army, Navy and Air Force Supply Management obligations for supply purchases from wholesale and retail supply organizations.
  - (2) DLA Supply Management: obligations for purchases of consumable supplies.
- (3) Fuel Purchases (Defense Fuel Supply Center): obligations for fuel for purchases of fuel for aircraft, automobiles, non-nuclear ships, trucks, and heating fuel.
- (4) US Transportation Command: travel and transportation obligations for movement of people or goods by military air (Air Mobility Command owned C-17, C-5, or C-141 aircraft or leased commercial aircraft) and military sealift (through Military Traffic Management Command operated port facilities, in Military Sealift Command owned or operated ships).
- (5) Defense Finance and Accounting Service (DFAS): obligations for services rendered by DFAS.
- (6) Communications Services (DISA): obligations to pay for services provided by the for the Defense Switched Network (formerly AUTOVON, AUTODIN, Bulk Encrypted Communications, Defense Switched Network, Washington Area Wideband System, Defense Information Systems Network, and Defense Data Network) and for information processing, computer services, and software development support provided by the Defense Information Technology Services Organization (DITSO).
- (7) Fund Purchases not reported on R-32 Do not report purchases from the following Fund business areas Defense Logistics Agency Distribution Depots; Navy Distribution Depots; Commissary Operations; and the Defense Reutilization and Marketing Services.

(Exhibit R-32, page 3 of 3)

#### PROGRAM ELEMENT COMPARISON SUMMARY

#### INTRODUCTION AND EXPLANATION OF CONTENTS

- 1. <u>General.</u> This document has been prepared to provide summary information on the (DoD Component) Research, Development, Test and Evaluation Program to congressional committees during the FY 19BY1/19BY2 hearings, The R-2 and R-3 exhibits provide narrative information on all RDT&E Program Elements and projects.
- 2. <u>Comparison of FY 19PY and 19CY Data.</u> A direct comparison of FY 19PY and FY 19CY data in the R-1 exhibit dated (a year previous), will reveal significant differences. Many of the differences are attributable to the following factors:
- a. FY 19CY reductions as a result of Congressional action on the appropriation (if applicable).
- b. FY 19PY funding changes subsequent to October 1, 19CY, including RDT&E Reprogramming Actions and a Supplemental Appropriation (if applicable).
- c. Reclassification of FY 19PY and FY 19CY data to achieve comparability with the program structure for FY 19BY1/19BY2. (If applicable, add short explanation.)
- 3. Relationship of FY 19BY1/19BY2 Budget Structure to the FY 19CY Budget Approved by Congress.
- a. Provide a list explaining the origin of all program elements that do not appear on the Base for Reprogramming Action (DD 1414) for RDT&E (DoD Component) which was prepared pursuant to final Congressional action of the FY 19CY DoD Budget Submission to Congress. Include all new starts, identified at the project level.
  - b. Provide a list explaining any program terminations or anticipated terminations.
- 4. <u>Classification.</u> Classified information is identified by use of brackets as []. It is preferred that this information be unclassified. If it is necessary to provide classified information, then it should be submitted separately.
- 5. <u>Table of Contents</u>. The Table of Contents is presented in two different formats by R-1 Line Item order and Alphabetically.
- 6. <u>Highly Classified Programs.</u> If the appropriation contains programs that are more classified and therefore not provided in this justification book, identify the affected program elements and titles.

**Exhibit R-33, Program Element Comparison Summary** 

(Exhibit R-33, page 1 of 2)

#### PROGRAM ELEMENT COMPARISON SUMMARY

#### **INTRODUCTION AND EXPLANATION OF CONTENTS**

PROGRAM ELEMENT REMARKS

BUDGET ACTIVITY 2: ADVANCED TECHNOLOGY DEVELOPMENT

0603710N Man-Machine Technology Provide the PE number and title of the previous PE(s).

Example: New program element for effort previously included in Program Elements 0603707N, Acoustics, 0603720N, Communications, and 0603727N, Training.

BUDGET ACTIVITY 4: TACTICAL PROGRAMS

0603209N Underwater Weapons New program proposed for FY 19BY1 Acceptance

Testing

0603382N Battle Group Anti-Air New program element for Project S0324,

Warfare Coordination Battle Group Anti-Air Warfare Coordination,

previously included in Program Element 0604303N.

0603506N Surface Ship Torpedo

Defense

Existing program element for effort last funded

in FY 19PY

0603576N CHALK EAGLE New program proposed for FY 19BY2

0603590N Wide Aperture Array

(Advanced)

New program element for Project S0222, Wide Aperture Array previously included in

Program Element 0603504N

0604228N SH-60 Carrier Variant New program proposed for FY 19BY1

(Exhibit R-33, page 2 of 2)

## MAJOR DEFENSE ACQUISITION PROGRAMS (MDAP) RDT&E PROTECT LEVEL (PL) DATA

Each Component must submit for each designated MDAP/pre-MDAP an automated RDT&E Project Level Funding (PL) data base that reconciles to the RDT&E Annex and FYDP data bases and the supporting congressional justification material. The RDT&E PL data base should be submitted for past year (PY), current year (CY), budget years (BY1 and BY2), and FYDP years (BY2+1 thru BY2+4), and should be formatted as specified below. The RDT&E Project Level funding data should be submitted as 2 flat ASCII files on either on 51/4 or 31/2 inch floppy, high or double density disk and submitted directly to OUSD(A&T), Mr. Steve Dratter, Room 1E474, telephone (703) 697-8020.

DATA	<u>COLUMNS</u>
PROJECT TITLE	
PE: Major Force Program	1:2
PE: PE ID	3:7
PE: Service Code	8:10
Project Number	11:16
Project Title	17:76
Project Classification	77:77
PROTECT FUNDING	
Budget Activity Code	1:2
PE: Major Force Program	3:4
PE: PE ID	5:9
PE: Service Code	10:12
Project Number	13:18
FY	19:22
Budget/Funding Request (in thousands)	23:32
Project Classification	33:33
Program Number (Identified on OUSD(A&T)'s MDAP listing).	34:36

#### Formatting Guidelines:

- 1. Left justify Service Code and Project Number.
- 2. Right justify Dollar Amounts and **DO NOT** use commas.
- 3. FY should be formatted as 1996,1997, etc.
- 4. Data are requested for PY thru BY2+4 (eg. FY 1996 FY 2003).
- 5. All alphanumeric characters are to be in UPPERCASE.

Old PE to New PE Crosswalk Data: A data file containing only those Program Elements (PEs) which have been renumbered since the last submission of the FYDP/RDT&E Annex must be submitted. It is to be submitted as a flat ASCII file on either a 5 1/4 or 3 1/2 inch floppy, high or double density disk directly to OUSD(A&T), Mr. Steve Dratter, Room 1E474, telephone (703) 697-8020.

#### **OLD TO NEW PE**

<u>DATA</u>	<u>COLUMNS</u>
PE: Old Major Force Program	1:2
PE: Old PE Identifier	3:7
PE: Old Service Code	8:10
PE: Old PE Name	11:70
PE: New Major Force Program	71:72
PE: New PE Identifier	73:77
PE: New Service Code	78:79
PE: New PE Name	80:139

MDAP RDT&E Project Level (PL) Data